Virginia Herpetological Society NEWSLETTER

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Catesbeiana Editor Steve Roble

<u>Newsletter Editor</u> Lori Williams

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<u>President</u> Bob Greenlee Jason Gibson - Pres. Elect

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IN THE NEWS . . .

NEW DEVELOPMENTS IN "CITES" LEGISLATION AFFECTS VIRGINIA HERP SPECIES

Sources: USFWS; FEDERAL REGISTER; CITES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is considering legislation that would affect a few reptile species native to Virginia. CITES attempts to protect threatened and endangered species across the world by restricting and prohibiting international trade, import, and export of listed species. Over 145 countries support and participate in CITES activities. Three main components make up CITES legislation: Appendix I, Appendix II, and Appendix III. Appendix I protects hundreds of species that are threatened with immediate extinction. No commercial trade in these species is allowed.

Appendix II lists thousands of species that may become threatened with extinction unless trade is regulated effectively; commercial trade in these species is allowed if trade is sustainable and specimens are obtained legally. Species are also listed under Appendix II if they are similar in appearance to a threatened species. Both Appendices I and II require international approval before listing of a particular species is allowed.

Appendix III applies more locally. It does not require international approval but asks for international support in monitoring and regulating trade of a threatened native species. This component helps protect native

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species that are already regulated on a state and/or federal level. Listing a species under Appendix III helps an individual country enforce existing laws.

As recently as September- December of 1999, recommendations were made that affect several native Virginia reptiles. The following is a summary of those recommendations:

- all 12 species of map turtles (*Graptemys* spp.) are recommended for listing under Appendix III, not Appendix II as previously suggested
- common snapping turtles (Chelydra serpentina) will not be listed at all
- North American soft-shell turtles (Apalone spp.) will not be listed under Appendix II as suggested
- red-eared sliders (*Trachemys scripta* elegans) will not be listed under Appendix II as suggested
- spotted turtles (Clemmys guttata) will be protected under Appendix II
- timber rattlesnakes (Crotalus horridus)
 will require further investigation before
 Appendix II listing will proceed. The
 controversy concerns the taxonomic
 definition of the species and the fact that
 this snake is known by other names (i.e.,
 "canebrake"). According to CITES,
 "canebrake" rattlesnakes have been dealt
 with differently in the past; after further

evaluation it is likely that *C. horridus* will receive Appendix II listing.

For more information on CITES legislation and activities, log onto the following web sites.

> http://www.wcmc.org.uk http://www.fws.gov

HUMAN POPULATION REACHES SIX BILLION

Source: 1999 United Nations Population Fund

According to the United Nations Population Fund (1999), the human population reached six billion on October 12, 1999. It has taken only 12 years to add one billion people to the world; historically, it took thousands of years to add the same amount. Approximately half of the world's population is under the age of 25, and over a billion people are between the ages of 15 and 24.

Globally, the population grows at a rate of 78 million a year, comparable to the total population of Germany. The number of people on the planet has doubled since 1960. Over 95 percent of the growth is in developing countries, while growth due to births has slowed or stopped in Japan, Europe, and North America. However, the United States' population continues to grow and is expected to increase considerably in the future due to immigration; no other

industrialized nation projects similar increases.

Some scientists have estimated the earth's "carrying capacity" for people to be 11 billion; recent population trends indicate that number could be reached as early as 2050 or 2075. In the future many needs will center on food security. For example, to feed a population of 8.9 billion people, the world would need twice the amount of basic calories consumed today. Water access for a population this size will also be critical.

In 1987 the world population surpassed 5 billion. Since then, evidence shows that wasteful, unbalanced consumption along with a growing population have negatively affected the global climate.

In January 2000, the United States government officially recognized the problem of global warming as fact, not speculation. No one knows the future effects of this phenomenon, however.

Rapid population growth and wasteful resource consumption are not the only problems that contribute to environmental damage, pressure on natural resources, and government instability. Poverty, malnutrition, disease, gender discrimination, and many other social, political, and economic ills all play a role in the state of our global environment.

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What does this news have to do with Virginia herps? Intuitively, we know the answer is "everything." As the state's population increases, especially in the north and east, we will see increasing pressures on herp habitat. Development, urban sprawl, contaminated water, wetland drainage, and habitat fragmentation are only a sample of the problems we will see, particularly in the Tidewater and Chesapeake Bay regions. Needless to say, the challenges conservation organizations face now and in the future are greater than ever.



CHECK OUT THE VHS HOMEPAGE!

<u>http://vhsociety.</u> home.mindspring.com/

SUGGESTIONS, COMMENTS, AND SUBMISSIONS WELCOME AT: shayg@mindspring.com

NOTICE FROM VDGIF

The VDGIF Nongame and Endangered Wildlife Program would like to make all VHS members aware of the following news concerning wildlife regulations: the division will have the opportunity to propose changes to "nongame" regulations for the year 2000. Reptile and amphibian regulations will be among those to be considered. The first board meeting taking proposals will occur in August of 2000 (exact dates not yet available). The board will vote on any proposed changes in October of 2000.

Anyone with recommendations pertaining to reptile and amphibian regulations should advise the department as soon as possible. At least one public meeting can be expected sometime during the process.

Please send comments directly to one of the following people:

Donald J. Schwab Wildlife Diversity Biologist Va. Dept. of Game and Inland Fisheries 5806 Mooretown Rd. Williamsburg, VA 23188 (757) 253-7072 e-mail: dschwab@dgif.state.va.us Raymond T. Fernald Nongame Wildlife Program Manager Va. Dept. of Game and Inland Fisheries P. O. Box 11104 Richmond, VA 23230-1104 (804) 367-8999

Volunteers Needed for Virginia Anuran Calling Survey

Source: Schwab, D., Madaris, K., and Greenlee, B. 1999. Anuran calling survey workshop. VDGIF.

On December 18, 1999, Don Schwab hosted a workshop at the Virginia Museum of Natural History in Martinsville on behalf of the Virginia Department of Game and Inland Fisheries (VDGIF). The workshop was designed to educate interested volunteers on why frog and toad calling surveys are needed and h



volunteers on why frog and toad calling surveys are needed and how to conduct them. Such surveys are necessary to monitor anuran populations in light of recent trends in population declines, malformations, and deformations. The information gathered from conducting these surveys will help

biologists and conservationists research and manage endangered amphibians. The North American Amphibian Monitoring Program (NAAMP) has established standard methods for conducting surveys and gathering data. Virginia's data will be included in the national database and will be compared to trends across the nation.

Dedicated people are needed to participate in this survey. Two or three times a year volunteers will survey established routes, identify frog and toad calls as accurately as possible, and record data and observations for VDGIF. For more information, contact Don Schwab (see above article for address).

ANNOUNCEMENT! SPRING 2000 MEETING OF THE VIRGINIA HERPETOLOGICAL SOCIETY

This year we will be surveying the many diverse natural areas found in the eastern Northern Neck and Middle Peninsula. Potential survey sites include the Big Island property on Dragon Run, Dameron Marsh, Belle Isle, and a number of other locations to be announced. The region provides a diversity of habitat typical of the lower Coastal Plain physiographic province. These habitats include wooded swamps, streamside riparian areas, marshes, marshy borders along ponds and lakes, abandoned agricultural lands, and edge habitat.

The business meeting and slide show of potential species will be Friday, May 19th, at the Lancaster County Community Library (804-435-1729). Accommodations are available in White Stone or Windmill Point.

ACCOMMODATIONS:

Lodging is available at the Whispering Pines Mctel in White Stone (804-435-1101). VHS members need to book rooms well in advance of the spring meeting because rooms are limited. Rates at the Whispering Pines Hotel range from \$59 to \$69 per night. Also available are Windmill Point and a number of locations in Warsaw.

NOTE: Lodging in White Stone will book rapidly, so plan accordingly. Get your reservations A.S.A.P.

DIRECTIONS TO WHITE STONE, VA:

FROM RICHMOND: Take Route 360 to Warsaw, then turn right on Route 3 towards Kilmarnock. Go on Route 3 through Kilmarnock to White Stone.

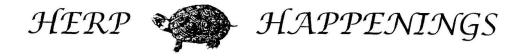
Or, take I-64 to Route 33. Take Route 33 to Route 3; go on Route 3 to White Stone.

FROM TIDEWATER: From I-64 follow Route 17 to Route 3. Go on Route 3 to White Stone.

DIRECTIONS TO LANCASTER COUNTY COMMUNITY LIBRARY:

FROM TAPPAHANNOCK: On Rt. 3, take the second stop light (School Street) to the right. Follow until you see the library—just past the Lancashire Nursing home on the right.

FROM WILLIAMSBURG OR YORKTOWN: Follow 17 to Rt. 3 toward Kilmarnock. Go to first stop light in Kilmarnock and take a left. The next left is School Street. The library is on the left just a short distance past the Lancaster Middle School.



VHS Fall Meeting and Symposium- The fall meeting was held at Three Lakes Nature Center and Aquarium on October 23, 1999. The business meeting included nominating and electing new officers, discussing the sale of Dr. Joe Mitchell and Karen Reay's reptile and amphibian atlas, and voting to donate \$100 to the Declining Amphibian Task Force. Other business concerned member dues increases, new VHS bumper stickers, possible spring survey locations, the status of the VHS webpage, and society by-laws regarding members who do not pay dues but still receive VHS publications. A paper session and tour of the nature center and aquarium followed the business meeting. Mike Pinder and Faye Farrell organized a successful raffle and silent auction. The VHS thanks the following people and organizations for donating items: Virginia Department of Game and Inland Fisheries, the Society for the Study of Amphibians and Reptiles, Three Lakes Nature Center, Ron Southwick. Acorn Naturalists, and the Smithsonian Institution. Special thanks go to Tom Thorpe and the rest of the staff at Three Lakes Nature Center for organizing facility use and for helping with the day's proceedings. Also, thanks go to Pete Garriock and Leslie Stagg for their help at the registration table. Minutes of the meeting will be available in the next *Catesbeiana*.

Paper Session - The following VHS members gave presentations during the fall meeting: Dr. Richard Hoffman (keynote speaker), Shannon Knapp, Faye Farrell, Jason Gibson, Lori Williams, Ann Messick, and Dr. Steve Roble. Topics included Virginia herpetology in the new millennium, risk sensitive foraging in the redback salamander, bog turtle population assessment, surveys in York and Powhatan Counties, nature photography, and selling the idea of conservation to the general public. The VHS thanks everyone who gave presentations. During the session, Dr. Richard Hoffman received the VHS Lifetime Achievement Award; he was presented with a plaque commemorating this honor.

VHS Elections - VHS members chose new officers at the last meeting. Paul Sattler is the new secretary/treasurer, replacing Shay Garriock. Robert Greenlee is the new president, replacing Mike Pinder. Members chose Jason Gibson as the new president-elect; Jason will become president in two years. Lori Williams volunteered to be newsletter editor, replacing Mike Pinder. **Teachers' Workshop** - Teachers participated in an amphibian and reptile workshop the morning of the fall VHS meeting. Carol Heiser, Bob Greenlee, and Tom Thorpe organized the workshop. Carol Heiser presented a hands-on educational session, Mike Pinder gave a talk on threatened and endangered herp species in Virginia, and Tom Thorpe and Eric Wilhelm took teachers on a field trip to observe current herp research at the nature center. Over 30 teachers attended the workshop, which will count as a continuing education credit for them. The VHS would like to thank everyone who presented at the workshop.

Wood Turtle Survey - VDGIF participated in a wood turtle survey in northwestern Virginia in the fall of 1999. Staff members from the VDGIF Fisheries and Wildlife Division in Verona, VA,

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and the Wildlife Diversity Division in Blacksburg. VA, gathered mark/recapture data and analyzed wood turtle habitat, including creeks and rivers. The Nongame and Endangered Wildlife program funds this ongoing research. Goals include determining habitat use by wood turtles among different landscape types reflecting various land uses. Using radio telemetry, George Mason University researchers tracked turtles in forested, agricultural, and urban landscapes. This information will help managers determine essential habitat needs within Virginia's changing landscape for this threatened species.

Bog Turtle Survey - VDGIF staff from the Wildlife Diversity Division in Blacksburg, VA, conducted a bog turtle survey in southwest Virginia in the summer of 1999. Workers gathered mark/recapture data, analyzed habitat and population demographics, and studied how the turtles move among small, adjacent wetlands. This information along with previous years' research will help state officials protect and conserve this federally threatened/state endangered reptile.

NOTICE TO VHS MEMBERS: DUES ARE DUE!

The new millennium has arrived! With the new century comes renewed energy and expectations in conservation organizations such as the Virginia Herpetological Society. Although our intentions may be good, sometimes we lack in our efforts. The VHS President Bob Greenlee, the other VHS officers, and the membership as a whole would like to urge members with outstanding dues to pay them as soon as possible.

January 1, 2000, marked a new calendar year which means "dues are due" for many members. Check your newsletter or the last issue you received of *Catesbeiana* to see when your subscription expires. If you have a "99" or earlier year on your mailing label, it is time to renew. Obviously, the VHS cannot function as a group without funding from members. Our goals of conservation, research, and education will ultimately fall short without active participation. One fundamental and crucial way members can get involved is to pay dues on time.

Members may not realize the costs incurred with producing publications such as the newsletter or the *Catesbeiana* journal. In light of these costs, officers and members present at the fall business meeting decided to withhold *Catesbeiana* from members with outstanding dues. Upon payment, those members will receive the issue of *Catesbeiana* they may have missed; all members will still receive the newsletter as scheduled.

So, if you have not done so already, please send your dues for 2000 to our Secretary/Treasurer Paul Sattler immediately. Let's have a productive year for the VHS!



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Eastern Glass Lizard

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Ophisaurus ventralis

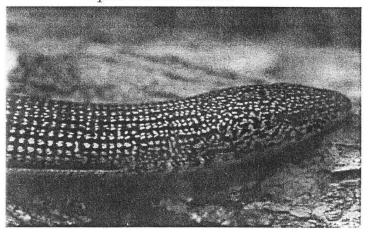


Photo Credit: Michael Dorcas; http://www.bio.davidson.edu/Biology/hercons/Myths/Herp_Myths.html

Status: State Threatened

Characteristics

The Eastern glass lizard has a slender, "snake-like" body and no limbs. Its Latin species name "ventralis" means "of the belly" and refers to its snake-like appearance and locomotion. Its smooth, glossy scales are square-shaped and overlapping. This lizard can grow to a maximum total length of 43 inches, two-thirds of which is its tail. Eastern glass lizards are olive-brown on top with a broad, tan stripe on their back, but their belly is white. On each side of the body is a dark, greenish-black, white peppered stripe above the lateral groove. They have 3-7 short, white bars bordered with black on each side of their neck and head. When caught, these lizards aggressively thrash and try to bite. If held by the tail, Eastern glass lizards will autotomize, or break off, their tail as a defense mechanism. For that reason it is rare to find one of these animals with its complete, original tail.

Habitat

Eastern glass lizards live in the Coastal Plain. Habitats include pine woodlands, marshy/sandy environments, wet meadows and grassy areas, and mesic woodlands. These animals are diurnally active and bask under vegetation with only a small part of their body exposed to the sun. When not basking and during the winter, Eastern glass lizards keep themselves buried underground.

Food

Eastern glass lizards are carnivores and primarily eat grasshoppers. Other prey items include spiders, crickets, beetles, caterpillars, cockroaches, snails, other small snakes and lizards, crayfish, skinks, and occasionally baby mice.

Distribution

In Virginia these lizards are only found on Back Bay National Wildlife Refuge and in False Cape State Park. National distribution includes the Coastal Plain of the southeastern states between Virginia and Louisiana.

Reproduction

We know little about the reproductive habits of this species. However, we do know that a female Eastern glass lizard makes her nest in a depression in the ground, and she places it under a suitable object such as a large log or rock. She lays 5-15 eggs in June or July and coils her body around them in the nest. Unlike skinks, she will not defend her nest but will gather her eggs if they become scattered. If the nest cover is removed and the eggs exposed, a brooding female will abandon the nest.

Threats

Habitat loss is the most significant threat to this species; construction activities at both sites are to blame. Improper or a lack of maintenance of natural grassy areas at these sites can also be harmful for this lizard. Predators that have the most effect on Eastern glass lizard populations are feral pigs. Also, most people do not realize that it is illegal to collect this animal or disturb its habitat. Any Eastern glass lizard found should be left alone and its location reported to a state biologist.

References

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Mitchell, J. C. and K. K. Reay. 1999. Atlas of Amphibians and Reptiles in Virginia. Virginia Department of Game and Inland Fisheries. Richmond, Virginia. 122pp.

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Literature Review

The purpose of this column is to inform members of recent herpetological research pertinent to Virginia or of special interest to the Society's membership. Papers or notes from professional journals, new books, "gray literature" reports, and popular magazine articles are acceptable for inclusion. Members are encouraged to send recently published items of interest to the editor. Submissions will be accepted to the approval of the editor.

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Taylor, K, L. P. Mayer, and C. R. Propper. 1999. Intra- and extracellular dehydrationinduced thirst-related behavior in an amphibian. Physiol. Behav. 65(4/5):717-721.

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Werner, E. E. and K. S. Glennemeier. 1999. Influence of forest canopy cover on the breeding pond distributions of several amphibian species. Coneia 1999 (1):1-12.

Atlas of Amphibians and Reptiles in Virginia



The Atlas of Amphibians and Reptiles in Virginia by Joseph C. Mitchell and Karen K. Reay is a new 122-page publication produced by the Virginia Department of Game and Inland Fisheries. The Atlas features point location distribution maps compiled from over 17,200 records for 74 species of amphibians and 61 species of reptiles found in the Commonwealth. Point locations with vouchered museum specimens are distinguished from literature records. A history of herpetofaunal exploration in Virginia, a description of Virginia's environmental features, and a conservation section are highlighted in the text, which includes an extensive literature citation. The spiral bound Atlas is printed on heavy weight paper that will stand up to use in the field. Herp enthusiasts will want a copy of the Atlas to see what has or has not been found in their area! The Atlas is currently available. To order a copy, specify your request and send a check for \$7.50 payable to Treasurer of Virginia to:

> David Kopf Wildlife Diversity Division Virginia Department of Game and Inland Fisheries 4010 W. Broad St., Richmond, VA 23230-1104 Phone (804) 367-8999



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MEMBERSHIP AT	PLICATION
Please sign me up for membership in the Virginia Herpetological Society for the year(s) of Membership begins and ends on a calendar year.	Check Membership Type Under 18 \$8.00
Name:	Regular \$15.00 Family \$20.00
Address:	Life \$225.00
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E-mail address: Make check or money order payable to: Virginia Herpetological Society	Paul Sattler, Secretary/Treasurer Department of Biology Liberty University 1971 University Blvd. Lynchburg, VA 24502

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IF THE YEAR ON YOUR LABEL IS HIGHLIGHTED, THEN ITS TIME TO RENEW YOUR MEMBERSHIP